



Si3865CDV vs. Si3865BDV

Description: Load Switch with Level-Shift

Package: TSOP-6

Pin Out: Identical

Part Number Replacements: Si3865CDV-T1-E3 replaces Si3865BDV-T1-E3

ABSOLUTE MAXIMUM RATINGS $T_A = 25\text{ }^\circ\text{C}$, unless otherwise noted				
PARAMETER	SYMBOL	Si3865CDV	Si3865BDV	UNIT
Input Voltage	V_{IN}	12	8	V
On/Off Voltage	$V_{ON/OFF}$	8	8	
Load Current	Continuous	± 2.8	± 2.9	A
	Pulsed	± 6	± 6	
Continuous Intrinsic Diode Conduction	I_S	- 1	- 1	
Power Dissipation	P_D	0.83	0.83	W
Operating Junction and Storage Temperature Range	T_J and T_{stg}	- 55 to 150	- 55 to 150	$^\circ\text{C}$
Maximum Junction-to-Ambient	R_{thJA}	150	150	$^\circ\text{C/W}$

SPECIFICATIONS $T_J = 25\text{ }^\circ\text{C}$, unless otherwise noted									
PARAMETER	SYMBOL	Si3865CDV			Si3865BDV			UNIT	
		MIN.	TYP.	MAX.	MIN.	TYP.	MAX.		
Off Characteristic									
Reverse Leakage Current	I_{FL}			1			1	μA	
Diode Forward Voltage	V_{SD}		- 0.75	- 1		- 0.77	- 1	V	
Dynamic									
Input Voltage Range	V_{IN}	1.8		12	1.8		8	V	
On-Resistance (P-Channel) at 1 A	$V_{IN} = 4.5\text{ V}$	$R_{DS(on)}$		0.050	0.060		0.045	0.060	W
	$V_{IN} = 2.5\text{ V}$			0.073	0.095		0.075	0.100	
	$V_{IN} = 1.8\text{ V}$			0.100	0.130		0.135	0.175	
On-State (P-Channel) Drain-Current	$V_{IN} = 5\text{ V}$	$I_{D(on)}$	1			1		A	
	$V_{IN} = 3\text{ V}$		1			1			

Specification comparisons are supplied as a courtesy to compare two devices and do not constitute a commercial product datasheet or any guarantee of identical performance. Designers should refer to the appropriate datasheets of the same number for guaranteed specification limits.